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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/749,719  | 12/31/2003  | Victor I. Chomenky   | 1004.009            | 8841             |
| 7590  | 02/14/2006  |                      | EXAMINER            |                  |
| Craig Gregersen<br>P.O. Box 386353<br>Bloomington, MN 55438 |             |                      | VRETTAKOS, PETER J  |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 3739                |                  |

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                                |                  |
|------------------------------|--------------------------------|------------------|
| <b>Office Action Summary</b> | Application No.                | Applicant(s)     |
|                              | 10/749,719                     | CHORNENKY ET AL. |
|                              | Examiner<br>Peter J. Vrettakos | Art Unit<br>3739 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 30 December 2005.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 7,8 and 19-21 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6 and 9-18 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____ .  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ .   | 6) <input type="checkbox"/> Other: _____ .                                  |

## **DETAILED ACTION**

The application is published application number: 2004/0158302. The publication is classified in US 606/41.

The Applicant is requested to provide (or check for accuracy) at the beginning of the Specification updated status information (serial numbers and patent numbers) of all related applications. The effective filing date of this application is 5-10-2000.

Pending claims as of 12-30-05 are 1-6 and 9-18.

Cancelled claims are 7-8 and 19-21.

The claims are most consistent with the embodiments in figure 1. Also, the claim language is replete with intended use language, which provides little patentable weight to apparatus claims. This is further addressed below.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 5, 9, 10, 11, 12 and 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Amplatz et al. (5,620,438).

Note: a recitation of the **intended use** of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Further, amendments to the claims dated 12-30-05 are addressed below even if the introduced claim language is not mentioned expressly in the rejection. (The amendment clarified the claims, but also introduced more intended use language ("so as to cause death of a sufficient..."), which does not add significant patentable weight to the claims.)

1. An apparatus for treatment of cerebral aneurysms and AVMs (intended use language), comprising:
  - a laser (col. 4:59) generating ultraviolet radiation (col. 4:59);
    - steerable (inherent to the term "guide wire") guide wire (54) including an optical fiber (44), said fiber extended from the proximal to the distal end of the guide wire and at the proximal end coupled to the laser;
    - an over-the-wire catheter (10) having an occlusive balloon (18) and a tube adapted for delivery (read col. 3:54 through col. 4:2) of saline (ports 34,36) distally to the balloon for displacing blood from the aneurysm or AVM (intended use language) and clearing the optical field in front of the distal end of the optical fiber.

2. The apparatus of claim 1, in which the laser generates UV radiation in the range of

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240 to 280 nanometers, corresponding to maximum UV absorption in DNA (intended use language).

4. An apparatus for treatment of aneurysms comprising:

a laser generating ultraviolet radiation (addressed above);  
a steerable guide wire (addressed above);  
an over-the-wire catheter (addressed above) having at least one optical fiber inside its wall, the proximal end of said fiber coupled to the laser, the distal end extended to the distal end of the catheter, said catheter adapted for delivery of saline (addressed above) for displacing blood from the aneurysm or AVM (intended use language) and clearing the optical field in front of the distal end of the optical fiber.

5. The apparatus of claim 4, in which the laser generates UV radiation in the range of 240 to 280 nanometers, corresponding to maximum UV absorption in DNA (intended use language). Also note col. 2:56-59.

9. Apparatus for treatment of aneurysms comprising: an ultraviolet radiation generator; and a catheter including means for delivering the ultraviolet radiation to the aneurysm (intended use language).

10. The apparatus of claim 9 wherein said catheter includes a passage and where said means for delivering comprises: a guide wire received within said passage and movable

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therein, said guide wire having an optical fiber inside it, said fiber extended from the proximal to the distal end of the guide wire and at the distal end coupled to said generator (addressed above).

11. The apparatus of claim 10 wherein said catheter further includes an over-the-wire catheter having an occlusive balloon and a tube adapted for delivery of an ultraviolet transparent wash fluid distally to the balloon for displacing blood from the aneurysm to clear the optical field in front of the distal end of the optical fiber (addressed above).

12. The apparatus of claim 11 wherein said ultraviolet radiation generator generates UV radiation in the range of about 240 to about 280 nanometers (intended use language).

Also note col. 2:56-59.

14. The apparatus of claim 10 wherein said guide wire is steerable (addressed above).

15. The apparatus of claim 9 wherein said ultraviolet radiation generator is a laser (addressed above).

16. The apparatus of claim 9 wherein said catheter includes a wall and a passage and a guide wire received within said passage and movable therein and wherein said means for delivering comprises at least one optical fiber, said at least one optical fiber disposed in said catheter wall (addressed above).

17. The apparatus of claim 16 wherein said generator generates UV radiation in the range of about 240 to about 280 nanometers (intended use language). Also note col. 2:56-59.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3,6,13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amplatz in view of Spears (4,512,762).

*Amplatz is silent regarding a fiber with a dispersive distal end.*

However, Spears discloses an analogous device with fiber with a dispersive distal end.

The combination of the two patents suggest an optical fiber with a distal end for scattering UV in different directions. The motivation to combine the patents is to "disperse light over the internal surface of the artery" and is found in col. 5:31-40.

Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify Amplatz in view of Spears by providing the fiber with a

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dispersive distal tip. Again, the motivation to combine the patents is to “disperse light over the internal surface of the artery” and is found in col. 5:31-40.

### ***Double Patenting***

The **nonstatutory** double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed **terminal disclaimer** in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6 and 9-18 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 of **U.S. Patent No. 6,692,486**. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims disclose the apparatus described in the patented method claims.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Spears (5,092,841, 5,344,419), Goldenberg et al. (5,470,330), Solano et al. (4,921,478), Aita et al. (6,132,423), Rosenbluth et al. (6,685,722).

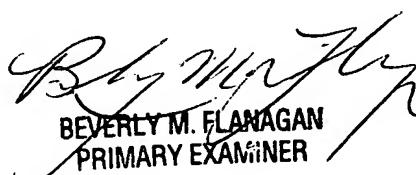
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J. Vrettakos whose telephone number is 571-272-4775. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C. Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Pete Vrettakos  
February 6, 2006

fj

  
BEVERLY M. FLANAGAN  
PRIMARY EXAMINER